REMARKS

Applicant is in receipt of the Office Action mailed January 25, 2005. Claims 1 – j34 are pending in the application. Claims 1, 20, and 21 have been amended. Reconsideration of the present case is earnestly requested in light of the following remarks.

Claims 1-34 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,966,532 to McDonald et al. (hereinafter "McDonald"). Applicant respectfully traverses this rejection.

Claim 1 has been amended to recite in part, "displaying information indicating a plurality of program processes, wherein each program process includes a plurality of operations for accomplishing a result". This element of claim 1 is not disclosed by McDonald.

According to McDonald's teaching, the user first selects a control on a user interface and then invokes a graphical code generation wizard for the control. The graphical code generation wizard displays a configuration panel or dialog allowing the user to configure the control, e.g., by selecting parameter values. The graphical code generation wizard then selects a graphical code template and configures the template with the selected parameter values. (See Abstract.)

The Examiner has asserted equivalence between the user interface controls taught in McDonald and the program processes recited in claim 1. However, Applicant submits that a program process as recited in claim 1 is not at all the same as a user interface control. In particular, amended claim 1 recites that, "each program process includes a plurality of operations for accomplishing a result". For example, lines 6 – 15 of p. 40 describe two examples of a program process, stating:

> "One typical program process may be referred to as "Acquire, Process, Display". In other words, a program based on this program process may acquire data from a device or UUT, process the data, and display the data. Another typical program process may be referred to as "Output, Wait, Acquire, Process, Display". In other words, a program based on this program process may output data to a device (e.g., a control signal), wait for a specified period of time (e.g., while the device responds to the control

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signal), acquire data from the device (e.g., data generated in response to the control signal), process the acquired data, and display the data."

A user interface control does not include a plurality of operations for accomplishing a result in this manner. Instead, McDonald teaches that a control simply represents input to or output from a graphical program (see Col. 4, lines 10-12).

Claim 1 has also been amended to recite, "wherein each program process has a corresponding graphical program template for performing the program process, wherein each graphical program template comprises a plurality of interconnected nodes". This element of claim 1 is also not taught by McDonald. The input or output performed by a user interface control as taught in McDonald is not performed by the graphical code template corresponding to the user interface control.

Similarly, claim 1 recites that, "including the first graphical program template in the graphical program comprises programmatically including a plurality of interconnected nodes in the graphical program for performing the first program process." The Examiner states that, "Since the controls in McDonald represent input to or output from a graphical program, a control can reasonably be interpreted as a process (process of inputting to or outputting from a graphical program)." However, a control in McDonald is operable to provide input to or display output from the graphical program before the user ever invokes the graphical code generation wizard and before the template for the control is ever included in the graphical program. Therefore there would be no reason to use the graphical code generation wizard to programmatically include nodes in the program to perform the input to or output from the graphical program because this functionality is already inherent in the control itself. Thus, McDonald does not teach programmatically including nodes in the graphical program for performing the input or output process represented by a control.

For at least the reasons presented above, Applicant respectfully submits that claim 1 and those claims dependent thereon are allowable over McDonald. Independent claim 21 has been amended to include similar limitations as claim 1, and so the arguments presented above apply with equal force to this claim. Applicant thus submits that claim 21 and those claims dependent thereon are similarly allowable over McDonald.

Claim 20 includes similar limitations as claims 1 and 21, but where the program process is a virtual instrument process. Applicant submits that the arguments presented above also apply to claim 20, and so claim 20 is similarly allowable over McDonald.

Regarding claims 10 and 28, the Office Action asserts that McDonald teaches all the features and limitations included therein. Applicant respectfully disagrees.

Claim 10 recites:

> 10. (Original) A method for creating a graphical program, the method comprising:
>
> displaying a plurality of graphical program templates, wherein each template comprises a plurality of interconnected nodes;
>
> receiving user input specifying a first template from the plurality of graphical program templates;
>
> programmatically including the first template in the graphical program, wherein said programmatically including the first template in the graphical program comprises programmatically including the interconnected nodes of the first template in the graphical program;
>
> for at least a first node that was programmatically included in the graphical program, performing the following:
>
> displaying a graphical user interface (GUI) associated with the first node, wherein the GUI comprises information useable in guiding a user in specifying desired functionality for the first node;
>
> receiving user input to the GUI specifying desired functionality for the first node;
>
> programmatically including graphical source code associated with the first node in the graphical program, wherein the programmatically included graphical source code implements the specified functionality.

The Office Action asserts that McDonald teaches all the features and limitations of claims 10 and 28. Applicant respectfully disagrees, and submits that there are numerous aspects of claims 10 and 28 not disclosed by McDonald.

According to the limitations of claims 10 and 28, the "first node" is a node that is programmatically included in the graphical program when the first template is programmatically included in the graphical program. A graphical user interface (GUI) associated with the first node is then displayed, and user input specifying desired functionality for the first node is received to this GUI. McDonald simply does not contain any teaching or suggestion whatsoever regarding a GUI that is displayed to

configure a node that was programmatically included in a graphical program as part of a template.

The Examiner has improperly asserted equivalence between McDonald's user interface control and the "first node" of claims 10 and 28. A user interface control is not at all the same as a node in a graphical program. Moreover, even if McDonald's user interface control is (improperly) equated with the first node of claims 10 and 28, McDonald still does not teach programmatically including a user interface control in a graphical program or displaying a GUI to configure a user interface control after it has been programmatically included in a graphical program. The GUIs taught in McDonald are used to select parameters affecting the inclusion of a graphical code template in a graphical program. They are not used to configure functionality of a user interface control (or any other element) after it has been programmatically included as part of a graphical code template.

Nowhere does McDonald teach or suggest "displaying a graphical user interface (GUI) associated with the first node, wherein the GUI comprises information useable in guiding a user in specifying desired functionality for the first node; receiving user input to the GUI specifying desired functionality for the first node; programmatically including graphical source code associated with the first node in the graphical program, wherein the programmatically included graphical source code implements the specified functionality." In fact, nowhere does McDonald teach, suggest, or even hint at configuring a single node (of the graphical program or template) via a GUI. Rather, McDonald discloses configuration of a user interface element, e.g., a "control or object", and/or configuration of a graphical code portion, where the configuration is specifically *not* described as being performed on a "per node" basis. Thus, Applicant respectfully submits that McDonald fails to teach all of the features and limitations of claims 10 and 28.

Thus, for at least the reasons presented above, Applicant respectfully submits that claims 10 and 28 and those claims respectively dependent thereon are patently distinct and non-obvious over McDonald, and are thus allowable.

Applicant also asserts that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-52400/JCH.

Also enclosed herewith are the following items:

☒ Request for Continued Examination

☒ Return Receipt Postcard

Respectfully submitted,

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